

Innovation Delivered to the Warfighter by the OX

By Tom Gwiazdowski and Sandy Mieczkowski

In one arena is the warfighting community: combatant commanders, joint task forces, strike groups, squadrons, battalions and Special Forces detachments. In another — is a group of highly qualified professionals who are working on warfighting initiatives and projects for sponsors.

The Space and Naval Warfare Systems Center (SSC) Charleston Office of eXperimentation (OX) onboard Naval Amphibious Base Little Creek, Norfolk, Va., is working to bridge the gap between these two groups. Chief of Experimentation for SSC Charleston Mr. Tom Gwiazdowski and Ms. Sandy Mieczkowski comprise the workforce of the Office of eXperimentation.

The OX takes direction from SSC Charleston chief engineer Phil Charles and formally reports to the Senior Engineering Group and Science and Technology Group quarterly. The OX mission is to assist SSC Charleston in taking its newly developed technologies and engineering solutions into joint, interagency and multinational experiments for warfighter validation and feedback.

"Once we started briefing some of the key leadership in SSC Charleston, they validated that what we were proposing had significant value to both SSC Charleston and the warfighters," Gwiazdowski said.

"The whole idea is to expose what our talented engineers are working on to the warfighters to gain valuable warfighter feedback as the engineers continue to develop and refine their initiatives. The dialogue works both ways — we show the warfighters what we're working on for them — and they give us feedback to determine the true utility and how it may be improved upon."

Initial discussions were followed by conducting a Lean Six Sigma value stream mapping event with assistance from SSC Charleston Black Belt Mr. Dale Davis to identify the processes and organizations that would be involved in this undertaking.

"The Lean Six Sigma event was an important milestone in taking our thoughts and formalizing them into an effective, efficient and streamlined process. This is still a new undertaking, and we are con-



Tom Gwiazdowski and Sandy Mieczkowski conducting a briefing onboard Norfolk Naval Station December 2006.

tinuously updating and adding to our process as we go along," Mieczkowski said.

There are a number of ongoing initiatives within SSC Charleston that support a wide variety of sponsors. While these initiatives fulfill sponsor requirements, there appears to be limited opportunity for exposing these initiatives to warfighters for feedback while the initiatives are under development.

Some projects may also have a deliberately narrow focus in fulfilling sponsor requirements. A number of these projects were found to have a wider application in the larger context of joint and multinational warfighting than their sponsors originally intended or envisioned.

For example, a project designed to assist in personnel identification for ship boarding parties could have tremendous value to Special Forces detachments, infantry rifle squads or any military force that requires identification technologies in combat situations.

Gwiazdowski and Mieczkowski intend to bring initiatives like these to the greater joint and multinational warfighting communities for consideration.

Innovation and creativity are the catalysts behind the OX's approach. Research, exploration, invention and originality are values central to SSC Charleston and its engineering and business development.

New discoveries, new directions and new attitudes challenge personnel and enable SSC Charleston to grow as a business entity and world class engineering organization. Without continuous in-

novation, engineering and business capabilities stagnate, and the tremendous creative capital possessed by the organization can wither away.

To inspire the workforce to even greater ingenuity, SSC Charleston senior leadership established an Innovation Program in fiscal year 2006. Thirteen proposals received funding, and it is anticipated that \$1–\$1.5 million will be available for investment in the Innovation Program in fiscal year 2007.

Gwiazdowski and Mieczkowski intend to match the project results of the Innovation Program with existing warfighter requirements so warfighters can provide immediate feedback to the developers.

U.S. Joint Forces Command has ultimate responsibility for transformation and experimentation for the entire Defense Department and NATO, the largest and longest standing multinational alliance. Gwiazdowski and Mieczkowski plan to partner with USJFCOM to bring new capabilities to the warfighter community for assessment.

"Joint Forces Command Innovation and Experimentation Directorate (J9) continues to be a great organization to partner with on many of our efforts," Gwiazdowski said. "They are a professional, focused and dedicated group of individuals who are doing a superb job helping the warfighters.

"We recently briefed Ms. Monica Shephard from JFCOM J9 and her support was very encouraging. She provided some great advice on how to proceed. We look forward to working with them

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on as many of their experimental efforts as our initiatives can enter."

While some project managers may be reluctant to expose developing technologies to experimentation and feedback, Gwiazdowski thinks that early experimentation and warfighter valuation are essential.

"I'd rather get news in the first 12 months of my work that can help focus my efforts than in the last 12 months — or even worse — when the final capability is delivered to the warfighter."

Inserting the initiative into the proper environment at the right time is critical to the process. The OX will capitalize on the service, joint, interagency and multinational transformation and experimentation efforts in Tidewater Virginia.

The OX will perform an initial analysis and determine the experimentation venue or exercise that would provide the best focus and scenario for warfighter feedback and military utility assessment.

For example, an initiative may have greater utility in a joint and multinational environment with involvement of other U.S. government agencies as well as humanitarian and nongovernmental organizations. If so, the OX will work to have the initiative inserted into an experiment, such as the multinational experimentation series conducted by J9. If an initiative has a multinational maritime focus, the OX will find an exercise that focuses on multinational maritime warfighting.

Initiatives can also be entered into the NATO Concept Development and Experimentation program, a collaborative effort among the NATO and Partnership for Peace nations, to share information and experiment results within the alliance.

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"We're starting to look at Advanced Concept Technology Demonstrations (ACTDs) and Joint Capability Technology Demonstrations (JCTDs), review them

and determine if there are matches between those warfighter requirements and the ongoing efforts of SPAWAR Systems Center Charleston."

The OX is set to have initial operational capability in the second quarter of fiscal year 2007 with full operational capability slated for the first quarter of fiscal year 2008. But the OX has already had some successes. Gwiazdowski and Mieczkowski recently matched an SSC Charleston project with a new Joint Capability Technology Demonstration which will potentially fulfill half of the JCTD objectives much earlier in the process than originally thought possible.

They also submitted several SSC Charleston projects into USJFCOM's Multinational Experiment 5 as well as Combined Endeavor 2007, a multinational security and communications exercise sponsored by U.S. European Command and NATO. Finally, they have taken a few real gems and shown them to a couple of combatant commanders who expressed a very strong interest in them.

Linking projects directly to warfighting requirements will result in a huge payoff for the warfighter — and that is really what it's all about.

Tom Gwiazdowski is the chief of experimentation and holds the technical warrant for experimentation for SSC Charleston. He is a retired U.S. Army officer with extensive experience in operational infantry units as well as joint and multinational commands. He was one of the founding fathers of the NATO Concept Development and Experimentation program and has served as an operational manager for an ACTD.

Sandy Mieczkowski works in the Office of eXperimentation. She was previously the manager of the SSC Charleston Tidewater Node of the FORCEnet Composeable Environment (FnCE) and one of its original architects. She has supported Naval Network Warfare Command and its Sea Trial events including Trident Warrior and the Navy's participation in Joint Expeditionary Force Experiment in the FnCE Node.

CHIPS

Department of the Navy Information Technology Umbrella Program Update

The Department of the Navy (DON) Information Management and Information Technology Conference is a great opportunity to meet representatives from the DON IT Umbrella Program of contracts and other acquisition professionals across the DON and Department of Defense.

The IM and IT Conference to be held January 30 through February 2 at the San Diego Convention Center, is hosted by the DON Chief Information Officer (CIO) and features knowledgeable speakers from a wide variety of topics, including commercial software acquisition and services through the DON IT Umbrella Program, DoD Enterprise Software Initiative (ESI) and SmartBUY.

Mr. Jim Clausen, from the Office of the Assistant Secretary of Defense for Networks and Information Integration and Chief Information Officer, the ESI chair; Mr. Floyd Groce, DON representative and ESI co-chair; and Mr. Tom Kireills, from the General Services Administration, will conduct a session regarding the SmartBUY program and enterprise licensing for commercial software, Wednesday, January 31 at 11:10 a.m.

Ms. Linda Greenwade, DON IT Umbrella Program manager, will conduct a DON IT Umbrella Program update, Thursday, February 1 at 10:45 a.m.

The DON IM and IT Conference is open to all DON government, military and support contractor attendees. No conference fee will be assessed, but registration is required.

The agenda and registration are available on the DON CIO Web site at <http://www.doncio.navy.mil>.

For additional information call (703) 607-3435 or (703) 602-6274.

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